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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,135	02/17/2004	Bernd Schulze	RUM223	3380
7590 02/22/2006			EXAMINER	
HORST KASPER 13 FOREST DRIVE WARREN, NJ 07059			BONK, TERESA	
			ART UNIT	PAPER NUMBER
			3725	

DATE MAILED: 02/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/781,135	Applicant(s) SCHULZE, BERND	
	Examiner Teresa M. Bonk	Art Unit 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-12 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/17/2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II in the reply filed on December 30, 2005 is acknowledged. The traversal is on the ground(s) that the method produces the hollow molded part. This is not found persuasive because the product does not require radial or tangential forming with an angle. The product could be formed by other ways including heating or drawing.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "bending of the mold blank" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 12 and 17 are objected to because of the following informalities: Claim 12 contains the awkward phrasing, "that in the following." Claim 17 contains the awkward phrasing "forming in the following a hollow form part by inner high pressure metal forming." A suggested change is the replacement of the phrases with "then" and "*then a hollow form part is formed by inner high pressure metal forming,*" respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 12 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bignucolo et al. (US Patent 6,513,243) in view of Meredith (US Patent 5,074,555). Bignucolo et al. discloses a method of producing automobile parts having a tubular part (1) with an outer diameter and a starting wall thickness (Figure 1), initially reducing the tubular part by radial deformation performed by rolling (fluoforming, rollers, Column 2, lines 32-35), over at least a second region (5) conically with an angle and over at least a third region (4) cylindrically to a smaller diameter (Column 2, lines 40-41) and then an inner high pressure metal forming step in the first and second regions (hydroforming, Figures 4-5, Column 2, lines 66-67 and Column 3, lines 1-4).

The combination of Bignucolo et al. discloses the invention substantially except for increased wall thickness relative to the starting wall thickness in the second and third regions. Meredith discloses a method of radially deforming a tubular part that increases wall thickness relative to the starting wall thickness in the second and third regions (Column 3, line 56 and Figures 2a-b). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Bignucolo et al.'s radial deformation step increase the wall thickness of the second and third region because "it is desirable to design (a tubular part) without the excessive weight...having a wall thickness along the tapered length,' (Column 1, lines 45-50).

6. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bignucolo et al. and Meredith as applied to claim 12 and 16-17 above, and further in view of Campbell et al. (US Patent 5,823,031). The combination of Bignucolo et al. and Meredith disclose the invention substantially except for a bending of the mold blank performed between the deformation step and the high pressure forming step. Campbell et al. discloses a bending of the mold blank to be performed between the radial deformation step and the high pressure forming step (Column 10, lines 5-8, Figures 6 and 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to bend the mold between the deformation and pressure forming steps in order to assist in achieving a desired product.

7. Claim 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bignucolo et al. and Meredith as applied to claim 12 and 16-17 above, and further in view of Self et al. (US Patent 2,267,623). The combination of Bignucolo et al. and Meredith disclose the invention substantially except for an intermediate annealing prior to the pressure forming and/or between the deformation step and the pressure forming step. Self et al. discloses an intermediate annealing prior to the pressure forming and/or between the deformation step and the pressure forming step (Column 2, lines 35-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to anneal the product after the radial deformation step in order to prevent "failure of the blank" (Column 5, lines 69-70) in a manner such as cracking or breaking before further forming is performed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and further show the state of the art.

US Patent 6,872,061

US Patent 4,157,654

US Patent 6,349,521

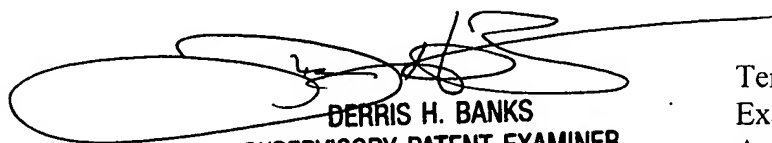
US Patent 6,748,786

US Patent 6,434,990

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Teresa M. Bonk whose telephone number is (571) 272-1901. The examiner can normally be reached on M-F 7:30AM - 5PM with alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-9900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
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Teresa M. Bonk
Examiner
Art Unit 3725